REMARKS

Claims 119-130 are presently pending in this application. No new claims have been added in this response.

In the Office Action mailed November 29, 2007, claims 119-130 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,611,700 issued to Vilsmeier et al ("Vilsmeier") in view of U.S. Patent No. 6,239,724 issued to Doron et al ("Doron").

A. Response to the Section 103(a) Rejection of Vilsmeier in view of Doron

Claims 119-130 were rejected under 35 U.S.C. §103(a) as being unpatentable over Vilsmeier in view of Doron. As described below, the combination of Vilsmeier and Doron fails to disclose or describe several of the features of these claims.

1. Claim 119 is Directed to An Apparatus for Locating an Tracking a Treatment Target in a Patient for Use in Connection with a Radiation Delivery System Including, *inter alia*, a Wireless Marker Configured to be Implanted in the Patient at a Site Relative to a Treatment Target

Claim 119 is directed to an apparatus for locating and tracking a treatment target in a patient. The apparatus includes a wireless marker configured to be implanted in the patient at a site relative to the treatment target. The apparatus further includes a sensor that obtains position information about the location and/or orientation of the marker and a computer operatively coupled to the sensor. The computer having a computer operable medium containing instructions that cause the computer to (a) receive the position information data from the sensor 12 or more times per minute, (b) determine an actual location of the treatment target, and (c) compute a displacement between the treatment target and the beam isocenter while the sensor obtains the position information.

2. Vilsmeier Discloses an Apparatus for Positioning a Body for Radiation Using a Flexible Position Sensor, Such as a Glass Fiber Cable

Vilsmeier discloses a method and apparatus for positioning a body for radiation. The apparatus includes a glass fiber cable 6, serving as the flexible position sensor, attached by its outer end 7 to a controller 8 so that the position and directional vector of the outgoing glass fiber cable 6 is clearly defined by a connecting point serving as a fiducial point to permit obtaining definite information as regard the location of a specific point or of several points, preferably as regards the location or curvature of the glass fiber 6 as a whole using this fiducial point. The other end of the glass fiber cable 6 is introduced into the body of the patient 1 and fixedly anchored in the site of the tumor. (col. 4-5, lines 62-67 and 1-5) The glass fiber cable 6 can be suitably curved, for example, during insertion in the tissue, so as to steer the glass fiber cable 6, *e.g.* around a bone. (col. 5, lines 34-37)

3. Doron Discloses a Telemetry System for Providing Spatial Positioning Information From Within a Patient's Body

A telemetry system and method for providing spatial positioning information from within a patient's body are disclosed. The system includes at least one implantable telemetry unit which includes (a) at least one first transducer being for converting a power signal received from outside the body, into electrical power for powering the at least one implantable telemetry unit; (b) at least one second transducer being for receiving a positioning field signal being received from outside the body; and (c) at least one third transducer being for transmitting a locating signal transmittable outside the body in response to the positioning field signal.

With reference to Figure 1, Doron disclose that system 100 includes at least one intrabodily implantable telemetry unit 102. Implantable telemetry unit 102 includes a first transducer 106 which serves for converting a power signal (as indicated by 108)

received from outside the body, into electrical power for powering implantable telemetry unit 102. Implantable telemetry unit 102 further includes a second transducer 111 which serves to receive a positioning field signal 114 which is transmitted from outside the body. Implantable telemetry unit 102 further includes a third transducer 110 which serves for transmitting a locating signal (as indicated by 112) which is transmitted outside the body of the patient in response to a positioning field signal (as indicated by 114). (col. 8, lines 55-67)

As shown in Figures 1 and 2 of Doron, the implantable telemetry unit 102 further includes a processor 140. The processor 140 serves for conditioning positioning field signal 114 and for multiplexing and modulating the transmitted locating signal 112. As specifically shown in FIG. 3, the processor 140 includes a conditioner 142, a multiplexer and a modulator 144, which communicate with a control unit 146. (col. 11, lines 28-38)

4. The Combination of Vilsmeier and Doron Fails to Disclose or Suggest at least an Apparatus for Use in Connection with a Radiation Delivery System Including, *inter alia*, a Wireless Marker Configured to be Implanted in the Patient at a Site Relative to a Treatment Target

Independent claim 119 is patentable over the combination of Vilsmeier and Doron because these references fail to disclose or suggest at least an apparatus for use in connection with a radiation delivery system including, "wireless marker configured to be implanted in the patient at a site relative to a treatment target."

As recognized by the Examiner and in contrast to the wireless transponder feature of claim 119, the flexible position sensor of Vilsmeier is a glass fiber cable, thereby not transmitting information wirelessly. (Office Action Dated November 29, 2008; page 4) However the Examiner then incorrectly concludes that "because Vilsmeier teaches that alternative sensors capable of providing three-dimensional information are suitable for use in their arrangement" the telemetry system of Doron can

be combined with the teachings of Vilsmeier to yield the claimed invention. (Office Action dated November 29, 2008; page 4) The applicants respectfully disagree.

Vilsmeier does not teach or disclose that *any* alternative sensor would work with the disclosed invention, rather Vilsmeier teaches and discloses flexible position sensors to include glass fiber cable, flexible cable or tape-type sensors "of which it is possible to detect the run of the sensor cable three-dimensionally on the basis of the signals output by the sensor. Thus, e.g. the curvature of the sensor at any desired point along its contour may be detected so that one or more fiducial points on the sensor can be easily detected which can be brought into a position relative to a tissue to be irradiated which does not shift out of place or only negligibly so." (col. 2, lines 16-27) Accordingly, Vilsmeier's teaching of a flexible position sensor having a contour which may be detected teaches away from a wireless sensor. Moreover, Doron fails to cure the above-noted deficiency of Vilsmeier to properly support a *prima facie* case of obviousness. For example, Doron fails to provide a motivation for replacing the flexible position sensor of Vilsmeier with the telemetry system of Doron. Furthermore, substituting the telemetry system of Doron with the flexible position sensors of Vilsmeier as suggested by the Examiner would destroy the functionality taught and disclosed by Vilsmeier, namely, wherein a curvature of the flexible position sensor may be detected at a given point along the sensor length. Accordingly, the combination of Vilsmeier and Doron fails to disclose or suggest all of the features of claim 119, and therefore, the Section 103(a) rejection of claim 119 should be withdrawn.

Claims 120-130 depend from or include features generally analogous to the features of claim 119. Accordingly, the Section 103(a) rejection of claims 120-130 should be withdrawn for at least the reasons discussed above with reference to claim 119 and for the additional features of these claims.

Conclusion

In view of the foregoing, the pending claims, comply with 35 U.S.C. § 112 and patentably define over the prior art. Applicant accordingly respectfully requests reconsideration of the application and a mailing of a Notice of Allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-6088. The Commissioner is authorized to change any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 50-0665, under Order No. 341148004US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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